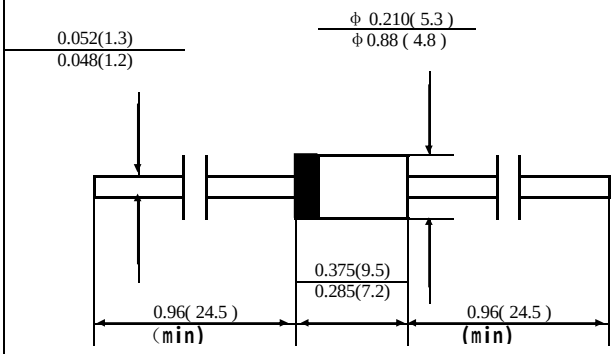
# TIGER ELECTRONIC CO.,LTD

# SR580

## 5.0AMP PLASTIC SILICON RECTIFIERS

## VOLTAGE RANGE: 80 VOLTS

DO-27




inch ( mm )

### FEATURES

. Low cost
. Diffused junction
. Low Leakage
. Low forward voltage drop
. High current capability
. Easily cleaned with Freon. Alcohol. Lsopropanol and similar solvents
. The plastic material carries U/L recognition 94V-O

### MECHANICAL DATA

. Case: JEDEC DO-27. molded plastic
. Terminals: Axial leads. Solderable per MIL - STD - 202. Method 208
. Polarity: Color band denotes cathode
. Weight: 0.041 ounce. 1.15 grams
. Mounting position: Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase. half wave. 60HZ. resistive or inductive load. For capacitive load. derate current by 20%

| | SYMBOL | SR580 | UNITS |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 80 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 56 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 80 | V |
| Maximum Average Forward Rectified Current 9.5mm Lead Length. | $I_{(AV)}$ | 5.0 | A |
| Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load | $I_{FSM}$ | 80.0 | A |
| Maximum Forward Voltage at 5.0A DC | $V_F$ | **0.85** | V |
| Maximum Reverse Current $T_A$= 25℃ | $I_R$ | **1.0** | mA |
| at Rated DC Blocking Voltage $T_A$= 100℃ | | **10.0** | |
| Typical Thermal Resistance ( Note 2 ) | $R_{QJA}$ | **20** | ℃/W |
| | $R_{QJL}$ | **8** | |
| Operating Junction Temperature Range | $T_j$ | —65 to 150 | ℃ |
| Storage Temperature Range | $T_{STG}$ | —65 to 150 | ℃ |

**NOTE:** 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

2. Thermal resistance junction to Ambient at 9.5mm lead length,P.C.B.mounted

# SR580

Fig.1-Forward Current Derating Curve

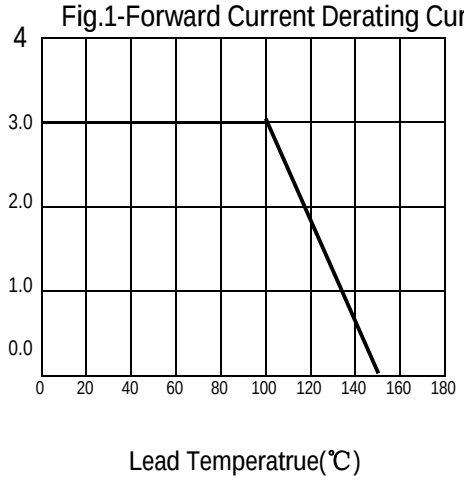



Fig.2-Maximum Non-repetitive Surge Current

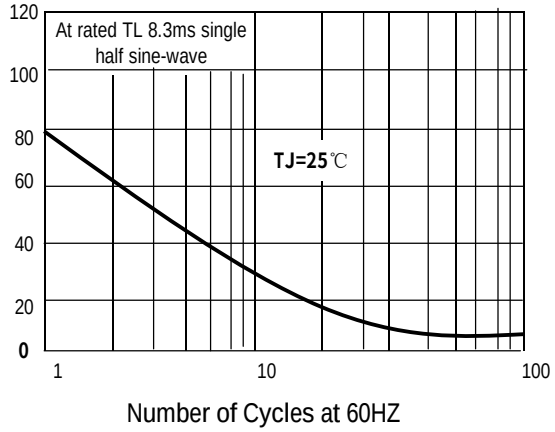



FIG. 3 -- Typical Junction Capacitance

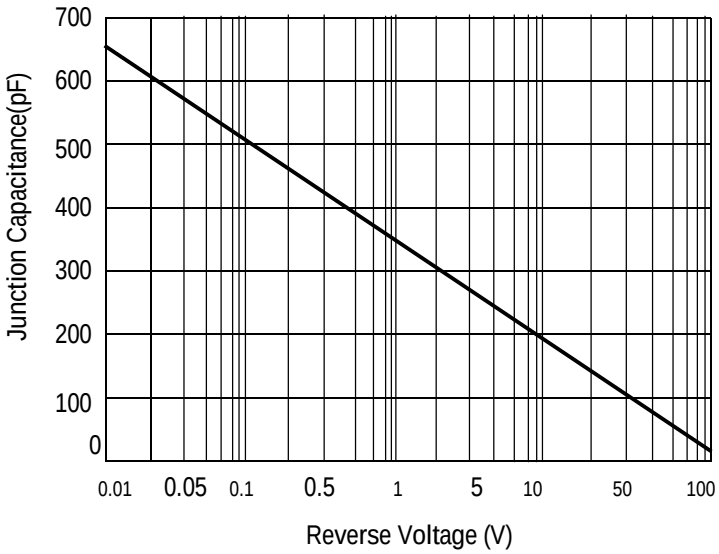



FIG. 4 -- TYPICAL REVERSE CHARACTERISTICS

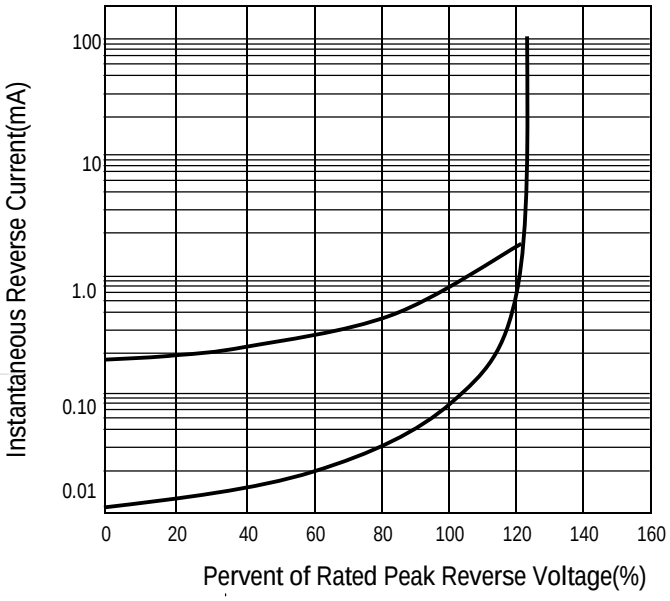



FIG. 5 -- Typical Forward Characteristics